

## CLAIMS

5 1. Method of obtaining 2-mercaptobenzothiazole from a melt of the raw product prepared by the reaction of aniline, carbon disulphide and sulphur by pressure synthesis in a reactor, where the melt contains 2-mercaptobenzothiazole, unreacted raw materials, intermediate products and pitches, characterized in that after reaching a stationary state of the reaction  
10 medium it includes the following steps:

a) crystallization of the 2-mercaptobenzothiazole raw product from an aniline solution,

b) dividing the liquid phase ( $F_K$ ) from crystallization from step a) in three parts,

15 c) removing one part of the liquid phase ( $F_{K1}$ ) from crystallization from step a) out of the process,

d) returning the second part of the liquid phase ( $F_{K2}$ ) from crystallization from step a) into the reactor for preparation of the raw product and supplementing it with sulphur and carbon disulphide with respect to aniline,

20 e) final purification of the crystallized 2-mercaptobenzothiazole from step a) in the aniline liquid phase and separation of the pure 2-mercaptobenzothiazole,

f) using the third part of the liquid phase ( $F_{K3}$ ) from crystallization from step a), supplemented with the liquid phase ( $F_R$ ) from final purification from step e) and possibly with aniline for crystallization of a further batch of the 2-mercaptobenzothiazole raw product,  
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g) using the liquid phase ( $F_R$ ) from final purification from step f), together with a part of the liquid phase ( $F_{K3}$ ) from step e), possibly with aniline, for crystallization of the 2-mercaptobenzothiazole raw product,

h) repeating steps a) to g).

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2. Method according to claim 1, characterized in that in the step c) 5 to 20 % of the liquid phase from crystallization are removed.

3. Method according to claim 1, characterized in that the crystallization of the 2-mercaptobenzothiazole raw product is performed from the aniline liquid phase from the preceding crystallization and/or from the aniline liquid phase from final purification and/or from pure aniline.

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4. Method according to claim 1, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is pure aniline or regenerated aniline or aniline liquid phase from the preceding final purification or a solution of 2-mercaptobenzothiazole in aniline or any combination thereof.

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5. Method according to claim 4, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is a saturated solution of 2-mercaptobenzothiazole in aniline.

15 6. Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by wash separation.

7. Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing.

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8. Method according to claim 7, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing on a filter.

9. Method according to claim 7, characterized in that 2-mercaptobenzothiazole  
25 obtained in step a) is finally purified by washing in a centrifuge.